Commonwealth of Kentucky Division for Air Quality

PERMIT APPLICATION SUMMARY FORM

Completed by: Julian D. Breckenridge

GENERAL INFORMATION:		
Name:	Somerset Recycling Services, Inc.	
Address:	1 Recycle Way	
	Somerset, KY 42503	
Date application received:	3/12/2007	
SIC Code/SIC description:	5093, Scrap and Waste Materials (merchant	
	wholesalers)	
Source ID:	21-199-00098	
Source A.I. #:	54848	
Activity ID:	APE20070001	
Permit:	F-07-028	
APPLICATION TYPE/PERMIT ACTIVITY:		
[x] Initial issuance	[] General permit	
Permit modification	[x] Conditional major	
Administrative	Title V	
Minor	[] Synthetic minor	
Significant	[x] Operating	
[] Permit renewal	[] Construction/operating	
COMPLIANCE SUMMARY:		
[x] Source is out of compliance	[] Compliance schedule included	
[] Compliance certification signed		
APPLICABLE REQUIREMENTS LIST:		
[] NSR [] NS	SPS [x] SIP	
[] PSD [] NE	ESHAPS [] Other	
[] Netted out of PSD/NSR [] No	ot major modification per 401 KAR 51:001, 1(116)(b)	
MISCELLANEOUS:		
[] Acid rain source		
[] Source subject to 112(r)		
[x] Source applied for federally enfo	<u> •</u>	
[] Source provided terms for altern	±	
[] Source subject to a MACT stand		
[] Source requested case-by-case 1	· · · · · · · · · · · · · · · · · · ·	
[] Application proposes new control	ol technology	
[x] Certified by responsible official		
[] Diagrams or drawings included		
[] Confidential business information	n (CBI) submitted in application	
[] Pollution Prevention Measures		
[] Area is non-attainment (list pollu	itants):	

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM ₁₀	8.24	116

SOURCE DESCRIPTION:

Somerset Recycling Services, Inc. located in Somerset, KY recycles clean, surplus, and quality rejected products. Their process uses various sizes of grinders to reduce the incoming products to a flake-type material, which is sold to post-secondary plastic manufactures. The first three machines grind hard plastic into chips. Each has its own cyclone (80% efficiency). Grinder #1 has its own inline baghouse (99.9% efficiency) downstream of the cyclone while units #2 and #3 are connected to a second baghouse downstream (99.9% efficiency) of their respective cyclones. Both baghouse units vent into the building. The combined control efficiency for each unit (1-3) is 99.98%. Machine #4 is a pre-grinder that merely breaks the original-sized hard plastic parts in a manageable size for Units 1-3. Machine #4 (pre-grinder) does not have a control device attached. Grinders #5-10 are used to grind plastic bags into a flake product. All six units (5-10) are identical. Each plastic bag grinder uses water to control dust (75% efficiency) and to aid in the grinding process. In addition to the water suppression, each unit has a cyclone of 80% efficiency. The exhaust from the each cyclone is ducted into its own dedicated final bag collector (50% efficiency) located outside for ease in particulate disposal. The combined control efficiency for each unit (5-10) is 97.5%.

On March 12, 2007 the Division of Air Quality received an application from Somerset Recycling Services, Inc. for an initial conditional major permit under 401 KAR 52:030. The application was completed on April 4, 2007 with the result that the source has maximum allowable emissions of 116 tons per year of particulate matter (PM/PM_{10}), based on emission limits from 401 KAR 59:010.

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

Somerset Recycling Services, Inc. has applied to operate under federally enforceable permit limits of less than 90 tons per year of PM/PM_{10} .

OPERATIONAL FLEXIBILITY:

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.